

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for producing a whetstone pellet, which is fixed multiple on a pedestal to form a whetstone, comprising the steps of: fixing plural base bodies on plural positions of a pedestal where plural abrasive grain layers are formed, and forming the abrasive grain layer on at least each end surface of said base bodies.
a columnar base body to be fixed to the pedestal, and
a plated layer formed on a surface of the base body, wherein said plated layer contains abrasive grains.

Claim 2 (Currently Amended): A process for producing a whetstone pellet according to claim 1, wherein [[,]] said step of forming the abrasive grain layer comprises the step of immersing said pedestal into a plating solution containing abrasive grains plated layer is an amorphous plated layer.

Claim 3 (Currently Amended): A process for producing a whetstone pellet according to claim 2, wherein[[,]] said plating solution in said step of forming the abrasive grain layer is an electroless plating solution base body is made of a metal that functions as a catalyst upon forming said amorphous plated layer.

Claim 4 (Currently Amended): A process for producing a whetstone according to claim 3, further pellet, a plurality of which is fixed on a pedestal to form a whetstone, comprising the steps of:

processing said plural base bodies fixed on said pedestal, before proceed said step of forming the abrasive grain layer, so that a plane shape formed by continuation of end surfaces of preparing plural columnar base bodies to be fixed on said pedestal has an objective shape to be processed, and

forming an abrasive grain layer with a plating solution containing abrasive grains on end surfaces of the columnar base bodies, which are opposite to the end surface to be fixed to said pedestal.

Claim 5 (Currently Amended): A process for producing a whetstone pellet according to claim 4, further comprising a step of:

forming a catalyst layer which precipitation of the plating layer from plating solution on each end surface of said base bodies promotes, wherein, said plural base bodies are fixed on a fixing plate, a catalyst layer for electroless plating is formed on end surfaces of said base bodies opposite to end surfaces to be fixed to said fixing plate before or after fixing said plural base bodies on said fixing plate, and said plural base bodies fixed on the fixing plate are immersed in an electroless plating solution containing abrasive grains to form abrasive layers on said catalyst layers of said base bodies.

Claim 6 (Currently Amended): A process for producing a whetstone ~~pellet~~ according to claim [[5]] 3, wherein[[,]] said step of fixing plural base bodies on said pedestal, comprising at least the steps of:

masking a fixing surface of said pedestal with a masking agent, and
fixing said plural base bodies on the fixing surface of said pedestal.
~~a masking agent is applied to a surface of said fixing plate, before immersing said plural base bodies in said electroless plating solution, to fix the end surfaces of said plural base bodies to said fixing plate with said masking agent as an adhesive, and said masking agent is applied to the surface of said plural base bodies, on which said abrasive grain layers are not formed.~~

Claim 7 (Currently Amended): A process for producing a whetstone ~~pellet~~ according to claim [[4]] 6, wherein[[,]] said masking agent is made of adhesive.

~~after forming said abrasive grain layer on each said base body, said abrasive layer is processed to uniformize thickness of said abrasive grain layers.~~

Claim 8 (Currently Amended): A process for producing a whetstone according to claim 6, further having plural abrasive grain layers dotting a pedestal, comprising the step of:
processing said plural base bodies fixed on said pedestal, after proceed said step of fixing plural base bodies on said pedestal, so that a plane shape formed by continuation of end surfaces of plural base bodies fixed on said pedestal has an objective shape to be processed.

~~plural columnar base bodies fixed to said pedestal, and
abrasive grain containing plated layers containing abrasive grains, that function as
said abrasive grain layers, formed only on surfaces of said base bodies including end
surfaces of said bodies.~~

Claim 9 (Currently Amended): A process for producing a whetstone according to claim 8, further comprising the step of:

forming a catalyst layer which precipitation of the plating layer promotes from
plating solution on each end surface of said base bodies wherein, said plated layer is an
amorphous plated layer.

Claim 10 (Currently Amended): A process for producing a whetstone having plural
abrasive grain layers dotting a pedestal, pellet which is fixed on a pedestal to use,
comprising steps of:

a columnar base body; and
an amorphous plated layer containing abrasive grains and formed on at least an
end surface of said base bodies,

wherein said base body is made of a metal having catalytic action when forming
said amorphous plated layer

preparing said pedestal and plural columnar base bodies to be fixed on said
pedestal,

~~fixing said plural base bodies on a surface of said pedestal, on which said base bodies are to be fixed, and~~
~~forming said abrasive grain layers on at least end surfaces of said base bodies with a plating solution containing abrasive grains.~~

Claim 11 (Currently Amended): A process for producing a whetstone according to claim 10, wherein, which comprises a pedestal and plural whetstone pellets fixed on said pedestal,

wherein said whetstone pellet comprising:

a columnar base body; and

an amorphous plated layer containing abrasive grains, formed on at least an end surface of said base bodies,

wherein said base body is made of a metal having catalytic action when forming said amorphous plated layer

~~after forming said abrasive grain layers on the end surfaces of said plural base bodies, said plural abrasive layers are processed, so that a plane shape formed by continuation of surfaces of said plural abrasive grain layers has an inverse shape of an objective surface to be processed.~~

Claim 12 (Currently Amended): A process for producing a whetstone pellet which
~~comprises steps of fixing plural base bodies on a pedestal, and forming abrasive grain~~
~~layers on end surfaces of the base bodies, comprising a step~~ the steps of:

~~processing said end surfaces of the base bodies so that a plane shape formed by~~
~~continuation of the end surfaces of said fixing plural base bodies fixed on said pedestal~~
~~has an inverse shape of an objective surface to be processed on a fixing plate;~~

forming an abrasive grain layer on each end surface of said base bodies by
immersing said fixing plate fixing plural base bodies in a plating solution containing
abrasive grains; and

detaching said base bodies, on which abrasive grain layer is formed, from said
fixing plate.

Claim 13 (Currently Amended): A process for producing a whetstone pellet according to
claim 12, wherein said plating solution is an electroless plating solution, and further an
~~optical element~~, comprising steps a step of:

forming a catalyst layer which precipitation of the plating layer from said
electroless plating solution promotes, on at least opposite surface to the end surface of
said base body to be fixed to said fixing plate, at least before said step of forming a
catalyst layer

~~preparing a whetstone in which base bodies are fixed on a pedestal, and plated~~
~~layers containing abrasive grains are formed only on surfaces of the base bodies~~
~~including end surfaces of the base bodies, and~~

~~processing a raw material of an optical element by using the whetstone to form~~
~~the optical element or an intermediate product of the optical element.~~

Claim 14 (Currently Amended): A process for producing ~~an optical element~~ a whetstone according to claim 13, wherein~~[,]~~ said step of fixing plural base bodies on said fixing plate comprise the steps of:

masking a surface of said fixing plate with a masking agent, before said step of forming an abrasive layer; and

fixing said base bodies on said surface of the fixing plate masked with the masking agent and masking each surface of said base bodies, on which said abrasive grain layers are not formed

said plated layers are amorphous plate layers.

Claim 15 (Currently Amended): A process for producing an optical element comprising the steps of: according to claim 13, wherein,

producing a whetstone;

preparing raw material of an optical element;

grinding said raw material of an optical element by said whetstone; and

polishing said raw material of an optical element grinded, wherein said step of producing a whetstone comprise the steps of:

preparing a pedestal and plural columnar base bodies to be fixed on said pedestal;

fixing said plural base bodies on the said pedestal; and

forming an abrasive gain layer with a plating solution containing abrasive grains on at least each end surface of said base bodies

~~in said processing step of the raw material of an optical element, a grinding process and a polishing process, which is to be carried out after said grinding process, are carried out, and~~

~~in said grinding process, the raw material of an optical element is ground by using the whetstone.~~

Claim 16 (Currently Amended): A process for producing an optical element according to claim [[13]] 15, wherein[[,]] said raw material of an optical element is fluorite or quartz.

Claim 17 (Currently Amended): A process for producing a an exposure apparatus equipped with an optical element having optical surface formed by a predetermined shape system including a lens, comprising the steps of:

producing a whetstone;

preparing raw material of a lens element;

grinding said raw material by said whetstone;

polishing said raw material grinded; and

installing said lens element obtained by polishing,

wherein said step producing a whetstone, comprising the steps of:

preparing a pedestal and plural columnar base bodies to be fixed on said pedestal;

fixing said plural base bodies on said pedestal; and

forming an abrasive grain layer with a plating solution containing abrasive grains on at least each end surface of said base bodies

~~preparing a whetstone in which plural base bodies are fixed on a pedestal, and plated layers containing abrasive grains are formed only on surfaces of the base bodies including end surfaces of the base bodies,~~

~~processing a raw material of a lens by using the whetstone to form the lens or an intermediate product of the lens, and~~

~~installing the lens obtained by processing the raw material of a lens into the optical system.~~

Claim 18 (Currently Amended): A process for producing a an exposure apparatus according to claim 17, wherein~~[,]~~ said raw material is fluorite or quartz said plated layers of the whetstone are amorphous plated layers.

Claim 19 (Currently Amended): A process for producing a an exposure apparatus according to claim 17, wherein,

said raw material of a lens is fluorite.